

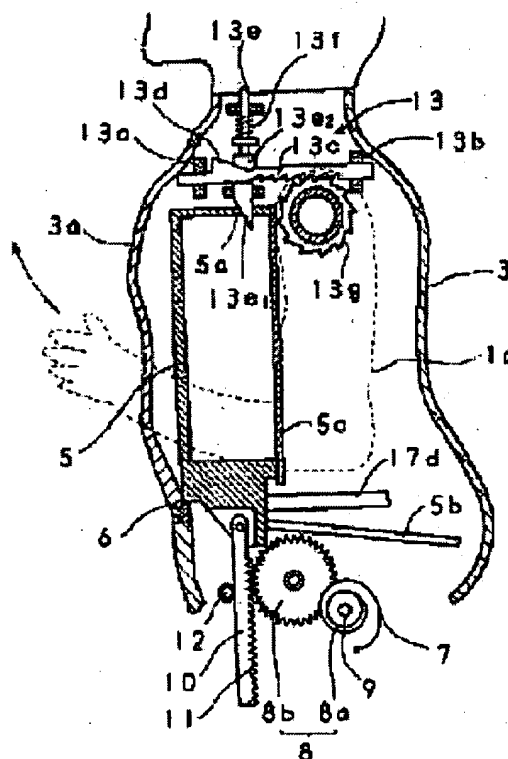
**DOLL**

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**Applicant:** TAKARA CO LTD  
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**Abstract of JP10118340**

**PROBLEM TO BE SOLVED:** To easily take out doll accessories from and store them into the body of a doll, so that the accessories can be used for the doll smoothly without fail.

**SOLUTION:** An opening is provided in a part of the hollowly formed body 3 of a doll, with a storage box 5 attached so that it can be pivotally stored or projected through the opening; a locking means 13 is also provided so that the box is engaged with it when stored in the body and that the engagement is released when a movable part like an arm of the doll is moved; additionally, an energizing means 7 is provided that energizes the box in the direction projecting outward from the box. Further, a lid locking means is provided which releases the lid of the box when it is projected.


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## CLAIMS

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[Claim(s)]

[Claim 1] The body of a doll with which opening of a part of fuselage formed in midair was carried out, and the receipt box where it was attached in the body of a doll free [ revolution receipt projection ] from said opening, A lock means to cancel a stop of said receipt box when said receipt box is stopped when said receipt box rotates and it is contained by said body of a doll, and moving part, such as an arm of said body of a doll, is moved in the predetermined direction, The doll which has an energization means to energize said receipt box in the direction which projects in a way outside said body of a drum doll.

[Claim 2] A receipt box has an energization means to always energize in the direction which opens the lid which opens and closes storage space. Furthermore, said lid is stopped in a closeout location until said receipt box projects from the condition that said receipt box is contained by the body of a doll, from the body of a doll to the method of outside. The doll which can contain the doll supply according to claim 1 characterized by establishing a lid lock means to cancel said stop when said receipt box projects in the method of outside from the body of a doll.

## DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the doll which can build in a doll supply.

[0002]

[Description of the Prior Art] It prepared opening in outside [ a part of ], the doll in which the built-in which is the conventional doll supply is possible opened the lid using anchoring and a finger free [ closing motion of the lid which opens and closes the opening ], or free [ attachment and detachment ], and contained the doll supply to the centrum, or had taken out the doll supply from the centrum while it fabricated the doll in midair.

[0003]

[Problem(s) to be Solved by the Invention] Therefore, the dexterity of a fingertip was required of receipt and drawing of a doll supply, since receipt drawing of a doll supply was troublesome to an unfamiliar small child, to him, neither hair makeup nor makeup play over a face could be made smooth at the doll, and the doll was upset for doll supply drawing, and it also became the cause of failure, such as making it reverse etc.

[0004] This invention is to offer the doll which can contain the doll supply which is made in view of the above-mentioned point, and drawing of the doll supply from the body of a doll and receipt can do the object according to an easy activity, and could be made to perform the activity of a doll supply successful smooth moreover.

[0005]

[Means for Solving the Problem] In order to attain the above-mentioned object, the doll by this invention The body of a doll with which opening of a part of fuselage formed in midair was carried out, and the receipt box where it was attached in the body of a doll free [ revolution receipt projection ] from said opening, A lock means to cancel a stop of

said receipt box when said receipt box is stopped when said receipt box rotates and it is contained by said body of a doll, and moving part, such as an arm of said body of a doll, is moved in the predetermined direction, It is characterized by having an energization means to energize said receipt box in the direction which projects in a way outside said body of a doll. By the above-mentioned configuration, if moving part, such as an arm, is moved, since a stop of as opposed to the body of a doll of a receipt box in a lock means will be canceled, a receipt box rotates, and a projection and its receipt box to a doll supply can be easily taken out ahead of the abdomen of the body of a doll, and it can use. Therefore, fixing the body of a doll to a fixed location, a supply can be taken out, for example, the hair makeup of a doll, makeup, and a hair ornament can be performed. Moreover, if a supply is contained in a receipt box and the body of a doll is made to contain a receipt box when play is finished, a doll will present the usual appearance again.

[0006] When it had an energization means always energize in the direction which opens the lid which opens and closes storage space, said lid stops in a closeout location until said receipt box projected from the condition that said receipt box is contained by the body of a doll, from the body of a doll to the method of outside further, and said receipt box projects in the method of outside from the body of a doll, as for a receipt box, it is desirable to be established a lid lock means to cancel said stop. If according to the above-mentioned configuration the moving part of a doll is moved and a receipt box is taken out outside, since the lid of a receipt box can open automatically, an inner supply can be taken out easily.

[0007]

[Embodiment of the Invention] Next, the gestalt of operation of this invention is explained based on a drawing. The perspective view and drawing 3 which show an appearance when the perspective view showing the appearance of the doll which drawing 1 requires for this invention, and drawing 2 rotate the arm which is moving part are the perspective view showing the condition that the lid of a receipt box was opened. The sectional view in which drawing 4 shows the internal structure of a doll, the sectional view in the condition that drawing 5 is the same and receipt box projected, the perspective view which drawing 6 takes out a receipt box and is shown, and drawing 7 are the sectional views explaining the closing motion device of the lid of a receipt box.

[0008] Like the usual doll, Arms 1a and 1b, foot 2b, and 2b can rotate the root as a core to a fuselage 3, respectively, and as (a) and (b) show foot 2a and 2b to drawing 1 by rotating to the fixed direction or an opposite direction, Doll D can sit down with a standing-up position, and can deform into another side from one side with a position.

[0009] Moreover, abdominal [ a part of ] is cut open, the comparatively big opening 4 is formed there, and this doll is attached in the circumference of that shaft free [ a revolution ] in that opening 4 with the shaft 6 with which lid 3a which has the appearance of abdomen epidermis was fixed to the fuselage 3 in that soffit section while having formed the fuselage 3 in midair. And the receipt box 5 is established in the tooth back of the lid 3a in one. In this way, as shown in drawing 4 , it is rotatable in between the condition that the receipt box 5 was contained in the fuselage 3, and the conditions of having projected ahead of abdominal as shown in drawing 2 , drawing 3 , and drawing 5 .

[0010] As shown in drawing 4 and drawing 5 , the slowdown means 8 which makes slow opening speed of an energization means 7 to always apply the force of the open direction

to the receipt box 5, and a receipt box is formed in the inner bottom of a fuselage 3. A spiral spring or a coil spring can be used for the energization means 7. For example, as for the spiral spring, the other end was combined with pinion 8a by having fixed the end to the fuselage 3, and the pinion has fixed on the shaft 9 and has given the rotational energy of the fixed direction to the pinion 8a. And main wheel 8b is clenched by pinion 8a, and the slowdown means 8 is constituted by the combination of pinion 8a and main wheel 8b.

[0011] The rack 11 with which the end section is formed in the link 10 pivoted in the base of the receipt box 5 is clenched by main wheel 8b. A link 10 has a tooth back supported by the elastic roller 12 which countered main wheel 8b and was attached free [ a revolution ], are concerned, and is not in change of the include angle of a link 10, and holds the condition that a rack 11 always gets into gear to main wheel 8b. By the above-mentioned configuration, the energization means 7 is energizing the receipt box 5 through a link 10 in the direction which always projects from an abdomen.

[0012] Hole 5a is prepared in the top face of the receipt box 5 in the condition of being contained by the fuselage 3, and the stop pawl 13e1 of the lock means 13 formed in the interior of the fuselage 3 of a doll at the hole 5a is inserted. Rack rod 13c supported by the supporter material 13a and 13b before and after forming the lock means 13 in a fuselage 5 free [ migration to a cross direction ], Hook member 13e which contacts 13d of taper sections formed in the rack rod, is interlocked with migration of the rack rod, and goes up and down, It is formed in the periphery of the root of one [ 13f of energization members which are always energizing the hook member 13e in the direction of rack rod 13c, and ] arm 1a of a doll, and consists of 13g of gearings currently clenched by the rack of said rack rod 13c. Hook member 13e has the shown around projection 13e2 contacted by the top face of 13d of taper sections of rack rod 13c while having the stop pawl 13e1 which has the taper side which carries out a declivity to the soffit section in the opening 4 direction of abdominal.

[0013] In this way, since hook member 13e resists 13f of energization members since the top face of the receipt box hits the taper side of the stop pawl 13e1 of hook member 13e when contained by the abdomen of a doll as receipt HOKKUSU 5 shows drawing 4 , and lifting retreat is carried out temporarily, a receipt box is smoothly contained by antinode circles. And if contained to a predetermined location, in order that the soffit section of the stop pawl 13e1 of hook member 13c may insert in hole 5a according to the stability of 13f of energization members, a receipt box is locked automatically.

[0014] On the other hand, if one [ of Doll D ] predetermined arm 1a is rotated in the predetermined direction, as shown in drawing 2 , for example When arm 1a is rotated in the direction raised ahead, by engagement of 13g of gearings and the rack of rack rod 13c Rack rod 13c is moved back, and since hook member 13e goes up through the shown around projection 13e2 to which it is in contact with taper 13d of the rack rod, the lock of the receipt box 5 is canceled. Therefore, the receipt box 5 always energized in the open direction by the energization means 7 rotates slowly to the circumference of a shaft 6 with the slowdown means 8, and as shown in drawing 2 and drawing 5 , it projects ahead of the abdomen of a doll.

[0015] Ventral plate 5b mostly extended in the direction of a right angle to the receipt box is prepared in the base of the receipt box 5. In this way, if it rotates until the receipt box 5 becomes almost level to the circumference of a shaft 6, and ventral plate 5b rotates

to the location which covers the abdominal opening 4 as shown in drawing 5 , ventral plate 5b will be stopped by stop projection 3b prepared inside in the right-and-left both sides of an effective area, and an appearance from which the ventral plate 5b constitutes the transverse plane of the abdomen of a doll will be presented. A means to regulate angle of rotation of the receipt box 5 is constituted by stop projection 3b and ventral plate 5b.

[0016] The end face section of ventral plate 5b is supported by the base of the receipt box 5 free [ a splash ] within few include angles with 5h of shafts, as shown in drawing 7 .

[0017] As shown in the effective area of the receipt box 5 at drawing 6 , both the lids 5c and 5d are energized for the lids 5c and 5d on either side in the open direction with hinge 5e and the small coil spring which was attached in a mounting eclipse and its hinge by 5f free [ the closing motion to double doors opening outward ] and which is not illustrated. And the hook 14 which moves between the location which stops the edge of the lid closed in said lids [ 5c and 5d ] near an edge as shown in drawing 7 , and the locations which retreat and cancel a stop to the base of the receipt box 5 is attached free [ rotation ] by shaft 14a prepared in the mid-position. In the long hole prepared in the soffit section of hook 14, pin 15a prepared in the end section of the interlocking member 15 has penetrated. Penetrating the interlocking member 15 to 5g of side holes prepared in the base of the receipt box 5, the other end of the interlocking member 15 projects towards the soffit section of said ventral plate 5b from the tooth back of the base of a receipt box. The upper bed section of hook 14 has the taper which carries out a declivity in lid 5c and the direction of 5d. moreover, the carp which energizes hook 14 in the stop location direction in the soffit section of hook 14, or the end section of the interlocking member 15 -- it has the energization members 16, such as NEBANE. The lid lock means is constituted by above-mentioned ventral plate 5b, the interlocking member 15, the hook 14, and the energization member 16.

[0018] In this way, although the hook is momentarily moved in the discharge location direction since lid 5c of the receipt box 5 which projects ahead [ of a doll / abdomen ], and the taper of the hook 14 which has the edge of the lid in a stop location when 5d is shut calmly are hit Since hook 14 will return to a stop location again by the energization member 16 as shown in drawing 7 (a) if a lid is thoroughly shut to a closeout location between them, Lids 5c and 5d are stopped in a closeout location. And where arm 1a is lowered to a predetermined location, when the upper part (the condition of projecting anterior part) of the receipt box 5 is raised by hand and the receipt box 5 is contained to the antinode circles of a doll, the top face of a receipt box is the stop pawl 13e1 of hook member 13e. In a taper, 13f of energization members is resisted and the hook member 13e is raised. Stop pawl 13e1 of hook member 13e with which hole 5a prepared in the receipt box 5 is caudad energized if a receipt box is thoroughly contained in a predetermined location In order to counter the soffit section, it is the stop pawl 13e1. The soffit section inserts in the hole 5a, and is locked.

[0019] And when the receipt box 5 rotates to the circumference of a shaft 6 with the energization means 7 and projects ahead by rotating arm 1a and canceling the lock of the receipt box 5 as mentioned above Since the interlocking member 15 resists the energization member 16, it is moved ahead and hook 14 is retreated as the force of an opposite direction is received, therefore the soffit section of ventral plate 5b shows drawing 7 (b) when ventral plate 5b is stopped by stop projection 3b As a stop is canceled

and it is shown in drawing 3 , Lids 5c and 5d rotate to the circumference of hinge 5e and 5f, and are opened automatically.

[0020] In the receipt box 5, personal belongings, such as makeup tools, such as the doll supply, for example, comb 17a, and brush 17b, and jewelry 17c, accessories, etc. are contained. the base top face of the receipt box 5 -- the accessories for dolls etc. -- attachment and detachment -- free -- also having -- it is good. Moreover, mirror 17d for using by cosmetics \*\*\*\*\* is attached in the base top face of a receipt box, enabling free attachment and detachment. Furthermore, the photograph 18 used as the sample of the hair style of a doll is stuck on the transverse plane of ventral plate 5b exchangeable, or the picture is drawn on it.

[0021] If right arm 1a is rotated in the predetermined direction by the above-mentioned configuration after sitting this doll, since the lock means 13 will be canceled and the stop pawl 13e1 will separate from hole 5a of a receipt box, As the receipt box 5 shows drawing 2 with the energization means 7 and the slowdown means 8 If it rotates slowly, it rotates to a projection and a predetermined location ahead of abdominal and ventral plate 5b is stopped by stop projection 3b at a predetermined include angle, according to the force further given from the energization means 7 Or since the soffit section of ventral plate 5b moves hook 14 to a discharge location through the interlocking member 15, as it is shown in drawing 3 according to the load of a receipt box, Lids 5c and 5d are automatically opened by the energization member which are Hinges 5e and 5f.

[0022] Therefore, this doll and those who are playing take out the doll supply with which close is present in a receipt box, \*\*\*\*\* and a hair ornament can be attached for the hair of a doll with a brush or a comb, or can put a ring etc., and can play. Moreover, mirror 17d is taken out and the looks of a doll are copied to this, and it can be shown as a doll and it can be enjoyed.

[0023] If they are again contained in the receipt box 5 and Lids 5c and 5d are calmly shut when the activity of a doll supply is ended, it will be held by hook 14 at a closeout condition. And when the receipt box 5 is again turned and stuffed into the abdomen of a doll, it is the stop pawl 13e1 of hook member 13e. It will insert in hole 5a of the top face of the receipt box 5, and will be stopped, and the appearance which is not different from the usual doll as shown in (b) of drawing 4 and drawing 1 will be presented.

[0024] In addition, in drawing 1 , the doll has dressed with the blouse which can open and close the part of a breast, and after it opens the part of the breast of that blouse as shown in drawing 2 and drawing 3 in case it pulls out the receipt box of this doll, it carries out revolution actuation of the arm 1a.

[0025] It does not pass over the above-mentioned explanation to a mere example, and, as for this invention, the concrete structure of the lock means of a receipt box, an energization means, and a slowdown means is not limited to the above-mentioned example. Moreover, when a receipt box is opened, the structure for canceling the lock condition of a lid automatically can also adopt the structure of other arbitration.

[0026] Then, another example is explained with reference to drawing 8 thru/or drawing 11 . Drawing 8 is in the condition that the receipt box projected, however drawing of longitudinal section in the condition that, as for the perspective view of the important section in the condition of not opening, the decomposition perspective view of an important section, and drawing 10 , the receipt box is held for the lid, and drawing 11 are the perspective views in the condition that the receipt box projected. In this example,

ventral plate 5b has the notching 20 which has notching 19 in a part for a top chord center section, and carries out opening of the projection 18 which projects on upper bed section right-and-left both sides to the central lower part caudad, and the slit 21 of two right and left which carry out opening caudad in those both sides. The shaft 22 level to the pars intermedia of a slit 21 is established. 23 is a rib for ventral plate reinforcement.

[0027] And this ventral plate 5b fits in said projection 18 between the guide rails 25 formed of the side where two guide plates 24a and 24b adjoin before and after preparing in the inner surface of both the sides of the drum section of the body of a doll, and is held free [ rise and fall ]. The guide plates 24a and 24b on either side are mutually formed in parallel with distance with these lids 5c and 5d of the stop projection 26 currently formed in the lids [ of the receipt box 5 / 5c and 5d ] back end section equal to the both-sides end-to-end dimension in a closed state.

[0028] The hinge block 27 has fixed in the tooth back of the receipt box 5. This hinge block has the supporters 28 and 30 prolonged up in right-and-left both sides and the medium of those, bearing 29 is formed in the upper part of the supporter 28 of both sides, and ventral plate 5b is combined with the receipt box 5 free [ a splash ] by carrying out the closet of the shaft 21 of said ventral plate 5b to this bearing. The bearing block 32 has fixed with the screw thread etc. to the medial surface of the center of the lower side of the opening 4 of the drum section 3 of the body of a doll. This bearing block by inserting a shaft 6 in the hole 33 which was formed in the concave letter form, fitted in the lower part of said hinge block 27 between the start sections of both sides, started with the hole 31 of a hinge block, and was prepared in the section The receipt box 5 is held free [ a revolution ] like the case of a previous example centering on the shaft 6 in between a receipt condition as shown in the 10th, and projection conditions as shown in the 11th.

[0029] The upper bed section which 34 is the connection member formed in the shape of radii, and has a hole 35 is inserted among the supporters 28, 29, and 28 of hinge BUROFUKKU 27. The shaft 36 which connected free [ a revolution ] by the hole 35 and the pin which the supporter 29 was made to penetrate, and was prepared in the soffit section of the connection member 34 is inserted in the bottom circles side of the body of a doll for the slant hole 38 of the mounting beam advice member 37, enabling free sliding. And the pressure receiving member 40 of the known slowdown means 39 which was built in the pars basilaris ossis occipitalis of the bearing block 32 and which consists of a gearing, a spiral spring, etc. makes the upper bed section of said slant hole 38 have projected. In this way, although the shaft 36 of the connection member 34 is located in the soffit section of the slant hole 38 of the advice member 37 when the receipt box 5 is contained in the body of a doll, as shown in drawing 10 It is stopped by the upper bed section of the slanting hole, after the shaft 36 of a connection member reaches near the upper bed section of a slant hole 38 and pushes up a pressure receiving member 40, when it projects besides the body of a doll, as the receipt box 5 shows \*\*\*\*11 . In case a pressure receiving member 40 is pushed up, the effectiveness that resistance works on a shaft 36 and the rotational speed of the projecting receipt box is slowed down is acquired. Moreover, when a shaft 36 is stopped by the upper bed section of a slant hole 38, angle of rotation of a receipt box is regulated.

[0030] Notching of the back of the advice member 37 is carried out, and flat spring 7' ahead prolonged in the top face of the notch from the back end section of an advice member is prepared. In the receipt condition of the receipt box 5, in order that the soffit



section of ventral plate 5b' may carry out the depression of flat spring 7', the force of the projection direction is always energized in the receipt box 5. That is, flat spring 7' constitutes an energization means to make a receipt box project.

[0031] Furthermore, the receipt box lock means in this example As shown in drawing 10 and 11, while preparing projection 13i of the shape of a semi-sphere which projects caudad at the head of 13h of elastic support members which project inside [ up ] the body of a doll In near the projection, extend the body of a doll in a longitudinal direction, and 13g [ of gearing-like stop members ] ' is fixed to shaft 1a' by which the end is connected with arm 1a of the right or the left. said projection 13i always presses in the direction of a stop member -- having -- making -- in addition, the top-face wall (projection -- a condition -- \*\*\*\* -- a front face -- a wall -- said -- a stop -- a member -- 13 -- g -- ' -- a trough -- fitting in -- obtaining -- a projection -- five -- a -- ' -- preparing -- constituting -- having -- \*\*\*\* .) of the receipt box 5

[0032] In this way, the receipt box 5 is pushed in in opening 4, and in case it is contained When a receipt box is suspended around opening 4 and receipt is completed after projection 5a' fitted into any one trough of 13g [ of stop members ] ' and rotated a part of the stop member Since projection 13i prevents the revolution of 13g [ of stop members ] ' according to the energization force of an elastic support member, a receipt box is locked by the receipt condition. And the energization means (7') is energizing the receipt box 5 in the projection direction through ventral plate 5b' at this time. Therefore, as the receipt box 5 rotates centering on a shaft 6 and it is shown in drawing 11 , it projects in the method of outside, at the same time the lock by said lock means will be canceled, if the predetermined arm of a doll is rotated in the predetermined direction.

[0033] In order that the projection may slide in contact with a guide plate 23 until 5h of projections of the receipt box 5 is outside all out from the effective area of opening 4, the lids 5c and 5d of a receipt box are coil springs. A closeout condition is maintained even if energized in the open direction. However, if 5h of projections is outside all out from an effective area, since 5h of projections will be opened from regulation by the guide plate 23, Lids 5c and 5d open automatically. In addition, although stop projection 14' which has a slanting taper is prepared in the transverse-plane lower part of ventral plate 5b, since the lower part of ventral plate 5b' is estranged from the lids [ of a receipt box / 5c and 5d ] back end side, it does not prevent disconnection of a lid, until 5h of projections is all out from an effective area.

[0034] On the other hand, after 5h of projections is all out from an effective area and Lids 5c and 5d open Since the lower part of ventral plate 5b' is approaching the back end section near of a receipt box When the back end section of the lid will move a little lower part of slipping and a ventral plate for the taper of stop projection 14' to the method of the inside of a drum section if Lids 5c and 5d are shut, and a taper is passed, the ventral plate lower part returns promptly and it is the stop projection. The back end section which are Lids 5c and 5d is stopped. That is, a lid is locked in the closeout condition.

[0035] As mentioned above, if the moving part of a doll is moved, since a lock means will cancel a lock similarly [ in this example / previous ], a receipt box rotates ahead from a drum section with an energization means, and while projecting, the lid of a receipt box is opened automatically. Therefore, a doll supply can be picked out from a receipt box, or the doll supply after an activity can be contained in a receipt box, and it can build in the doll inside of the body. Therefore, the effectiveness of preventing loss of non-used

\*\*\*\*\* is also large again.

[0036] The receipt box 5 can also be carried out in the mode by which a lid is not opened automatically, when it projects from a doll. In this case, a play person should just open a lid by hand himself. Moreover, when a lid is automatically opened at the time of the completion of projection of a receipt box, while the troublesomeness of a lid disconnection activity is lost like the above-mentioned example, the interest over a doll becomes still stronger and there is an advantage which excites customer interest.

[0037]

[Effect of the Invention] As mentioned above, if the moving part of a doll is operated, since according to invention of claim 1 the receipt box built in the body of a doll rotates and it projects ahead, if a lid is opened, a doll supply can be easily taken out from inside. Therefore, drawing of the doll supply from a doll and receipt can be performed according to an easy activity, and, moreover, the activity of the doll supply to a doll can be performed smoothly, without the fall of a doll etc. going wrong.

[0038] moreover, according to invention of claim 2, if the moving part of a doll is moved, since the lid of a projection and its receipt box is opened automatically, a receipt box gives joy ahead further at a play person, and the interest over a doll will be markedly alike and will become strong.

## TECHNICAL FIELD

[Field of the Invention] This invention relates to the doll which can build in a doll supply.

## PRIOR ART

[Description of the Prior Art] It prepared opening in outside [ a part of ], the doll in which the built-in which is the conventional doll supply is possible opened the lid using anchoring and a finger free [ closing motion of the lid which opens and closes the opening ], or free [ attachment and detachment ], and contained the doll supply to the centrum, or had taken out the doll supply from the centrum while it fabricated the doll in midair.

## EFFECT OF THE INVENTION

[Effect of the Invention] As mentioned above, if the moving part of a doll is operated, since according to invention of claim 1 the receipt box built in the body of a doll rotates and it projects ahead, if a lid is opened, a doll supply can be easily taken out from inside. Therefore, drawing of the doll supply from a doll and receipt can be performed according to an easy activity, and, moreover, the activity of the doll supply to a doll can be performed smoothly, without the fall of a doll etc. going wrong.

[0038] moreover, according to invention of claim 2, if the moving part of a doll is moved, since the lid of a projection and its receipt box is opened automatically, a receipt box gives joy ahead further at a play person, and the interest over a doll will be markedly alike and will become strong.

## TECHNICAL PROBLEM

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[Problem(s) to be Solved by the Invention] Therefore, the dexterity of a fingertip was required of receipt and drawing of a doll supply, since receipt drawing of a doll supply was troublesome to an unfamiliar small child, to him, neither hair makeup nor makeup play over a face could be made smooth at the doll, and the doll was upset for doll supply drawing, and it also became the cause of failure, such as making it reverse etc.

[0004] This invention is to offer the doll which can contain the doll supply which is made in view of the above-mentioned point, and drawing of the doll supply from the body of a doll and receipt can do the object according to an easy activity, and could be made to perform the activity of a doll supply successful smooth moreover.

## MEANS

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[Means for Solving the Problem] In order to attain the above-mentioned object, the doll by this invention The body of a doll with which opening of a part of fuselage formed in midair was carried out, and the receipt box where it was attached in the body of a doll free [ revolution receipt projection ] from said opening, A lock means to cancel a stop of said receipt box when said receipt box is stopped when said receipt box rotates and it is contained by said body of a doll, and moving part, such as an arm of said body of a doll, is moved in the predetermined direction, It is characterized by having an energization means to energize said receipt box in the direction which projects in a way outside said body of a drum doll. By the above-mentioned configuration, if moving part, such as an arm, is moved, since a stop of as opposed to the body of a doll of a receipt box in a lock means will be canceled, a receipt box rotates, and a projection and its receipt box to a doll supply can be easily taken out ahead of the abdomen of the body of a doll, and it can use. Therefore, fixing the body of a doll to a fixed location, a supply can be taken out, for example, the hair makeup of a doll, makeup, and a hair ornament can be performed. Moreover, if a supply is contained in a receipt box and the body of a doll is made to contain a receipt box when play is finished, a doll will present the usual appearance again.

[0006] When it had an energization means always energize in the direction which opens the lid which opens and closes storage space, said lid stops in a closeout location until said receipt box projected from the condition that said receipt box is contained by the body of a doll, from the body of a doll to the method of outside further, and said receipt box projects in the method of outside from the body of a doll, as for a receipt box, it is desirable to be established a lid lock means to cancel said stop. If according to the above-mentioned configuration the moving part of a doll is moved and a receipt box is taken out outside, since the lid of a receipt box can open automatically, an inner supply can be taken out easily.

[0007]

[Embodiment of the Invention] Next, the gestalt of operation of this invention is explained based on a drawing. The perspective view and drawing 3 which show an appearance when the perspective view showing the appearance of the doll which drawing 1 requires for this invention, and drawing 2 rotate the arm which is moving part are the perspective view showing the condition that the lid of a receipt box was opened. The

sectional view in which drawing 4 shows the internal structure of a doll, the sectional view in the condition that drawing 5 is the same and receipt box projected, the perspective view which drawing 6 takes out a receipt box and is shown, and drawing 7 are the sectional views explaining the closing motion device of the lid of a receipt box.

[0008] Like the usual doll, Arms 1a and 1b, foot 2b, and 2b can rotate the root as a core to a fuselage 3, respectively, and as (a) and (b) show foot 2a and 2b to drawing 1 by rotating to the fixed direction or an opposite direction, Doll D can sit down with a standing-up position, and can deform into another side from one side with a position.

[0009] Moreover, abdominal [ a part of ] is cut open, the comparatively big opening 4 is formed there, and this doll is attached in the circumference of that shaft free [ a revolution ] in that opening 4 with the shaft 6 with which lid 3a which has the appearance of abdomen epidermis was fixed to the fuselage 3 in that soffit section while having formed the fuselage 3 in midair. And the receipt box 5 is established in the tooth back of the lid 3a in one. In this way, as shown in drawing 4 , it is rotatable in between the condition that the receipt box 5 was contained in the fuselage 3, and the conditions of having projected ahead of abdominal as shown in drawing 2 , drawing 3 , and drawing 5 .

[0010] As shown in drawing 4 and drawing 5 , the slowdown means 8 which makes slow opening speed of an energization means 7 to always apply the force of the open direction to the receipt box 5, and a receipt box is formed in the inner bottom of a fuselage 3. A spiral spring or a coil spring can be used for the energization means 7. For example, as for the spiral spring, the other end was combined with pinion 8a by having fixed the end to the fuselage 3, and the pinion has fixed on the shaft 9 and has given the rotational energy of the fixed direction to the pinion 8a. And main wheel 8b is clenched by pinion 8a, and the slowdown means 8 is constituted by the combination of pinion 8a and main wheel 8b.

[0011] The rack 11 with which the end section is formed in the link 10 pivoted in the base of the receipt box 5 is clenched by main wheel 8b. A link 10 has a tooth back supported by the elastic roller 12 which countered main wheel 8b and was attached free [ a revolution ], are concerned, and is not in change of the include angle of a link 10, and holds the condition that a rack 11 always gets into gear to main wheel 8b. By the above-mentioned configuration, the energization means 7 is energizing the receipt box 5 through a link 10 in the direction which always projects from an abdomen.

[0012] Hole 5a is prepared in the top face of the receipt box 5 in the condition of being contained by the fuselage 3, and the stop pawl 13e1 of the lock means 13 formed in the interior of the fuselage 3 of a doll at the hole 5a is inserted. Rack rod 13c supported by the supporter material 13a and 13b before and after forming the lock means 13 in a fuselage 5 free [ migration to a cross direction ], Hook member 13e which contacts 13d of taper sections formed in the rack rod, is interlocked with migration of the rack rod, and goes up and down, It is formed in the periphery of the root of one [ 13f of energization members which are always energizing the hook member 13e in the direction of rack rod 13c, and ] arm 1a of a doll, and consists of 13g of gearings currently clenched by the rack of said rack rod 13c. Hook member 13e has the shown around projection 13e2 contacted by the top face of 13d of taper sections of rack rod 13c while having the stop pawl 13e1 which has the taper side which carries out a declivity to the soffit section in the opening 4 direction of abdominal.

[0013] In this way, since hook member 13e resists 13f of energization members since the

top face of the receipt box hits the taper side of the stop pawl 13e1 of hook member 13e when contained by the abdomen of a doll as receipt HOKKUSU 5 shows drawing 4 , and lifting retreat is carried out temporarily, a receipt box is smoothly contained by antinode circles. And if contained to a predetermined location, in order that the soffit section of the stop pawl 13e1 of hook member 13c may insert in hole 5a according to the stability of 13f of energization members, a receipt box is locked automatically.

[0014] On the other hand, if one [ of Doll D ] predetermined arm 1a is rotated in the predetermined direction, as shown in drawing 2 , for example When arm 1a is rotated in the direction raised ahead, by engagement of 13g of gearings and the rack of rack rod 13c Rack rod 13c is moved back, and since hook member 13e goes up through the shown around projection 13e2 to which it is in contact with taper 13d of the rack rod, the lock of the receipt box 5 is canceled. Therefore, the receipt box 5 always energized in the open direction by the energization means 7 rotates slowly to the circumference of a shaft 6 with the slowdown means 8, and as shown in drawing 2 and drawing 5 , it projects ahead of the abdomen of a doll.

[0015] Ventral plate 5b mostly extended in the direction of a right angle to the receipt box is prepared in the base of the receipt box 5. In this way, if it rotates until the receipt box 5 becomes almost level to the circumference of a shaft 6, and ventral plate 5b rotates to the location which covers the abdominal opening 4 as shown in drawing 5 , ventral plate 5b will be stopped by stop projection 3b prepared inside in the right-and-left both sides of an effective area, and an appearance from which the ventral plate 5b constitutes the transverse plane of the abdomen of a doll will be presented. A means to regulate angle of rotation of the receipt box 5 is constituted by stop projection 3b and ventral plate 5b.

[0016] The end face section of ventral plate 5b is supported by the base of the receipt box 5 free [ a splash ] within few include angles with 5h of shafts, as shown in drawing 7 .

[0017] As shown in the effective area of the receipt box 5 at drawing 6 , both the lids 5c and 5d are energized for the lids 5c and 5d on either side in the open direction with hinge 5e and the small coil spring which was attached in a mounting eclipse and its hinge by 5f free [ the closing motion to double doors opening outward ] and which is not illustrated. And the hook 14 which moves between the location which stops the edge of the lid closed in said lids [ 5c and 5d ] near an edge as shown in drawing 7 , and the locations which retreat and cancel a stop to the base of the receipt box 5 is attached free [ rotation ] by shaft 14a prepared in the mid-position. In the long hole prepared in the soffit section of hook 14, pin 15a prepared in the end section of the interlocking member 15 has penetrated. Penetrating the interlocking member 15 to 5g of side holes prepared in the base of the receipt box 5, the other end of the interlocking member 15 projects towards the soffit section of said ventral plate 5b from the tooth back of the base of a receipt box. The upper bed section of hook 14 has the taper which carries out a declivity in lid 5c and the direction of 5d. moreover, the carp which energizes hook 14 in the stop location direction in the soffit section of hook 14, or the end section of the interlocking member 15 -- it has the energization members 16, such as NEBANE. The lid lock means is constituted by above-mentioned ventral plate 5b, the interlocking member 15, the hook 14, and the energization member 16.

[0018] In this way, although the hook is momentarily moved in the discharge location direction since lid 5c of the receipt box 5 which projects ahead [ of a doll / abdomen ] ,

and the taper of the hook 14 which has the edge of the lid in a stop location when 5d is shut calmly are hit. Since hook 14 will return to a stop location again by the energization member 16 as shown in drawing 7 (a) if a lid is thoroughly shut to a closeout location between them, Lids 5c and 5d are stopped in a closeout location. And where arm 1a is lowered to a predetermined location, when the upper part (the condition of projecting anterior part) of the receipt box 5 is raised by hand and the receipt box 5 is contained to the antinode circles of a doll, the top face of a receipt box is the stop pawl 13e1 of hook member 13e. In a taper, 13f of energization members is resisted and the hook member 13e is raised. Stop pawl 13e1 of hook member 13e with which hole 5a prepared in the receipt box 5 is caudad energized if a receipt box is thoroughly contained in a predetermined location. In order to counter the soffit section, it is the stop pawl 13e1. The soffit section inserts in the hole 5a, and is locked.

[0019] And when the receipt box 5 rotates to the circumference of a shaft 6 with the energization means 7 and projects ahead by rotating arm 1a and canceling the lock of the receipt box 5 as mentioned above. Since the interlocking member 15 resists the energization member 16, it is moved ahead and hook 14 is retreated as the force of an opposite direction is received, therefore the soffit section of ventral plate 5b shows drawing 7 (b) when ventral plate 5b is stopped by stop projection 3b. As a stop is canceled and it is shown in drawing 3, Lids 5c and 5d rotate to the circumference of hinge 5e and 5f, and are opened automatically.

[0020] In the receipt box 5, personal belongings, such as makeup tools, such as the doll supply, for example, comb 17a, and brush 17b, and jewelry 17c, accessories, etc. are contained. the base top face of the receipt box 5 -- the accessories for dolls etc. -- attachment and detachment -- free -- also having -- it is good. Moreover, mirror 17d for using by cosmetics \*\*\*\*\* is attached in the base top face of a receipt box, enabling free attachment and detachment. Furthermore, the photograph 18 used as the sample of the hair style of a doll is stuck on the transverse plane of ventral plate 5b exchangeable, or the picture is drawn on it.

[0021] If right arm 1a is rotated in the predetermined direction by the above-mentioned configuration after sitting this doll, since the lock means 13 will be canceled and the stop pawl 13e1 will separate from hole 5a of a receipt box, As the receipt box 5 shows drawing 2 with the energization means 7 and the slowdown means 8. If it rotates slowly, it rotates to a projection and a predetermined location ahead of abdominal and ventral plate 5b is stopped by stop projection 3b at a predetermined include angle, according to the force further given from the energization means 7. Or since the soffit section of ventral plate 5b moves hook 14 to a discharge location through the interlocking member 15, as it is shown in drawing 3 according to the load of a receipt box, Lids 5c and 5d are automatically opened by the energization member which are Hinges 5e and 5f.

[0022] Therefore, this doll and those who are playing take out the doll supply with which close is present in a receipt box, \*\*\*\*\* and a hair ornament can be attached for the hair of a doll with a brush or a comb, or can put a ring etc., and can play. Moreover, mirror 17d is taken out and the looks of a doll are copied to this, and it can be shown as a doll and it can be enjoyed.

[0023] If they are again contained in the receipt box 5 and Lids 5c and 5d are calmly shut when the activity of a doll supply is ended, it will be held by hook 14 at a closeout condition. And when the receipt box 5 is again turned and stuffed into the abdomen of a

doll, it is the stop pawl 13e1 of hook member 13e. It will insert in hole 5a of the top face of the receipt box 5, and will be stopped, and the appearance which is not different from the usual doll as shown in (b) of drawing 4 and drawing 1 will be presented.

[0024] In addition, in drawing 1, the doll has dressed with the blouse which can open and close the part of a breast, and after it opens the part of the breast of that blouse as shown in drawing 2 and drawing 3 in case it pulls out the receipt box of this doll, it carries out revolution actuation of the arm 1a.

[0025] It does not pass over the above-mentioned explanation to a mere example, and, as for this invention, the concrete structure of the lock means of a receipt box, an energization means, and a slowdown means is not limited to the above-mentioned example. Moreover, when a receipt box is opened, the structure for canceling the lock condition of a lid automatically can also adopt the structure of other arbitration.

[0026] Then, another example is explained with reference to drawing 8 thru/or drawing 11. Drawing 8 is in the condition that the receipt box projected, however drawing of longitudinal section in the condition that, as for the perspective view of the important section in the condition of not opening, the decomposition perspective view of an important section, and drawing 10, the receipt box is held for the lid, and drawing 11 are the perspective views in the condition that the receipt box projected. In this example, ventral plate 5b has the notching 20 which has notching 19 in a part for a top chord center section, and carries out opening of the projection 18 which projects on upper bed section right-and-left both sides to the central lower part caudad, and the slit 21 of two right and left which carry out opening caudad in those both sides. The shaft 22 level to the pars intermedia of a slit 21 is established. 23 is a rib for ventral plate reinforcement.

[0027] And this ventral plate 5b fits in said projection 18 between the guide rails 25 formed of the side where two guide plates 24a and 24b adjoin before and after preparing in the inner surface of both the sides of the drum section of the body of a doll, and is held free [ rise and fall ]. The guide plates 24a and 24b on either side are mutually formed in parallel with distance with these lids 5c and 5d of the stop projection 26 currently formed in the lids [ of the receipt box 5 / 5c and 5d ] back end section equal to the both-sides end-to-end dimension in a closed state.

[0028] The hinge block 27 has fixed in the tooth back of the receipt box 5. This hinge block has the supporters 28 and 30 prolonged up in right-and-left both sides and the medium of those, bearing 29 is formed in the upper part of the supporter 28 of both sides, and ventral plate 5b is combined with the receipt box 5 free [ a splash ] by carrying out the closet of the shaft 21 of said ventral plate 5b to this bearing. The bearing block 32 has fixed with the screw thread etc. to the medial surface of the center of the lower side of the opening 4 of the drum section 3 of the body of a doll. This bearing block by inserting a shaft 6 in the hole 33 which was formed in the concave letter form, fitted in the lower part of said hinge block 27 between the start sections of both sides, started with the hole 31 of a hinge block, and was prepared in the section The receipt box 5 is held free [ a revolution ] like the case of a previous example centering on the shaft 6 in between a receipt condition as shown in the 10th, and projection conditions as shown in the 11th.

[0029] The upper bed section which 34 is the connection member formed in the shape of radii, and has a hole 35 is inserted among the supporters 28, 29, and 28 of hinge BUROFUKKU 27. The shaft 36 which connected free [ a revolution ] by the hole 35 and the pin which the supporter 29 was made to penetrate, and was prepared in the soffit

section of the connection member 34 is inserted in the bottom circles side of the body of a doll for the slant hole 38 of the mounting beam advice member 37, enabling free sliding. And the pressure receiving member 40 of the known slowdown means 39 which was built in the pars basilaris ossis occipitalis of the bearing block 32 and which consists of a gearing, a spiral spring, etc. makes the upper bed section of said slant hole 38 have projected. In this way, although the shaft 36 of the connection member 34 is located in the soffit section of the slant hole 38 of the advice member 37 when the receipt box 5 is contained in the body of a doll, as shown in drawing 10 It is stopped by the upper bed section of the slanting hole, after the shaft 36 of a connection member reaches near the upper bed section of a slant hole 38 and pushes up a pressure receiving member 40, when it projects besides the body of a doll, as the receipt box 5 shows \*\*\*\*11 . In case a pressure receiving member 40 is pushed up, the effectiveness that resistance works on a shaft 36 and the rotational speed of the projecting receipt box is slowed down is acquired. Moreover, when a shaft 36 is stopped by the upper bed section of a slant hole 38, angle of rotation of a receipt box is regulated.

[0030] Notching of the back of the advice member 37 is carried out, and flat spring 7' ahead prolonged in the top face of the notch from the back end section of an advice member is prepared. In the receipt condition of the receipt box 5, in order that the soffit section of ventral plate 5b' may carry out the depression of flat spring 7', the force of the projection direction is always energized in the receipt box 5. That is, flat spring 7' constitutes an energization means to make a receipt box project.

[0031] Furthermore, the receipt box lock means in this example As shown in drawing 10 and 11, while preparing projection 13i of the shape of a semi-sphere which projects caudad at the head of 13h of elastic support members which project inside [ up ] the body of a doll In near the projection, extend the body of a doll in a longitudinal direction, and 13g [ of gearing-like stop members ] ' is fixed to shaft 1a' by which the end is connected with arm 1a of the right or the left. said projection 13i always presses in the direction of a stop member -- having -- making -- in addition, the top-face wall (projection -- a condition -- \*\*\*\* -- a front face -- a wall -- said -- a stop -- a member -- 13 -- g -- ' -- a trough -- fitting in -- obtaining -- a projection -- five -- a -- ' -- preparing -- constituting -- having -- \*\*\*\* .) of the receipt box 5

[0032] In this way, the receipt box 5 is pushed in in opening 4, and in case it is contained When a receipt box is suspended around opening 4 and receipt is completed after projection 5a' fitted into any one trough of 13g [ of stop members ] ' and rotated a part of the stop member Since projection 13i prevents the revolution of 13g [ of stop members ] ' according to the energization force of an elastic support member, a receipt box is locked by the receipt condition. And the energization means (7') is energizing the receipt box 5 in the projection direction through ventral plate 5b' at this time. Therefore, as the receipt box 5 rotates centering on a shaft 6 and it is shown in drawing 11 , it projects in the method of outside, at the same time the lock by said lock means will be canceled, if the predetermined arm of a doll is rotated in the predetermined direction.

[0033] In order that the projection may slide in contact with a guide plate 23 until 5h of projections of the receipt box 5 is outside all out from the effective area of opening 4, the lids 5c and 5d of a receipt box are coil springs. A closeout condition is maintained even if energized in the open direction. However, if 5h of projections is outside all out from an effective area, since 5h of projections will be opened from regulation by the guide plate



23, Lids 5c and 5d open automatically. In addition, although stop projection 14' which has a slanting taper is prepared in the transverse-plane lower part of ventral plate 5b, since the lower part of ventral plate 5b' is estranged from the lids [ of a receipt box / 5c and 5d ] back end side, it does not prevent disconnection of a lid, until 5h of projections is all out from an effective area.

[0034] On the other hand, after 5h of projections is all out from an effective area and Lids 5c and 5d open Since the lower part of ventral plate 5b' is approaching the back end section near of a receipt box When the back end section of the lid will move a little lower part of slipping and a ventral plate for the taper of stop projection 14' to the method of the inside of a drum section if Lids 5c and 5d are shut, and a taper is passed, the ventral plate lower part returns promptly and it is the stop projection. The back end section which are Lids 5c and 5d is stopped. That is, a lid is locked in the closeout condition.

[0035] As mentioned above, if the moving part of a doll is moved, since a lock means will cancel a lock similarly [ in this example / previous ], a receipt box rotates ahead from a drum section with an energization means, and while projecting, the lid of a receipt box is opened automatically. Therefore, a doll supply can be picked out from a receipt box, or the doll supply after an activity can be contained in a receipt box, and it can build in the doll inside of the body. Therefore, the effectiveness of preventing loss of non-used \*\*\*\*\* is also large again.

[0036] The receipt box 5 can also be carried out in the mode by which a lid is not opened automatically, when it projects from a doll. In this case, a play person should just open a lid by hand himself. Moreover, when a lid is automatically opened at the time of the completion of projection of a receipt box, while the troublesomeness of a lid disconnection activity is lost like the above-mentioned example, the interest over a doll becomes still stronger and there is an advantage which excites customer interest.

## DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] It is the perspective view showing the usual appearance of the doll concerning the 1st example of this invention.

[Drawing 2] Similarly, it is a perspective view in the condition of having made the receipt box projecting.

[Drawing 3] They are some amplification perspective views showing the condition that the lid of a receipt box was opened, similarly.

[Drawing 4] Similarly, it is the sectional view showing the internal structure of an important section.

[Drawing 5] Similarly, it is the end view of the important section in the condition that the receipt box projected.

[Drawing 6] It is the perspective view taking out and showing only a receipt box.

[Drawing 7] It is the sectional view showing the automatic disconnection device of the lid of a receipt box, and its actuation.

[Drawing 8] It is the perspective view of the important section of the 2nd example of this invention.

[Drawing 9] Similarly, it is the decomposition perspective view of an important section.

[Drawing 10] Similarly, it is drawing of longitudinal section in the receipt condition of a

receipt box.

[Drawing 11] Similarly, it is drawing of longitudinal section in a receipt box projection condition.

[Description of Notations]

3 Fuselage

3a Abdomen

4 Opening

5 Receipt Box

5b, 5b' Ventral plate

6 Shaft

7 7' Energization means

8 40 Slowdown means

8a Pinion

8b Main wheel

10 Rack Rod

11 Rack

12 Roller

13 13' Lock means

5b, 14, 15, 14a, 16;5b', 14' Lid lock means

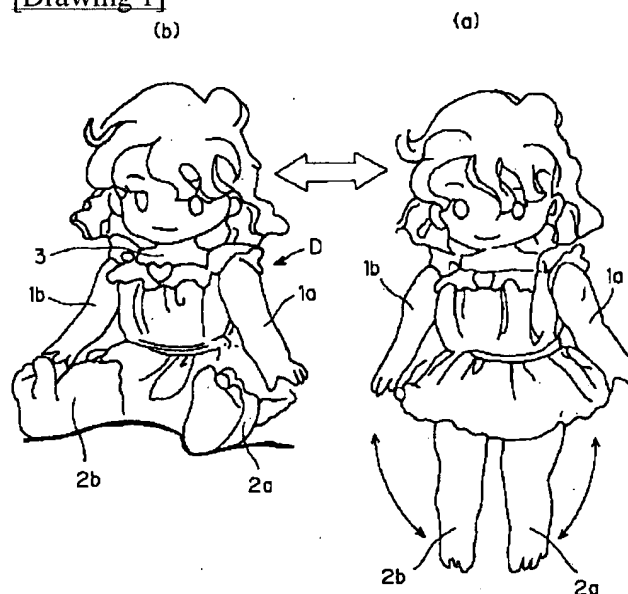
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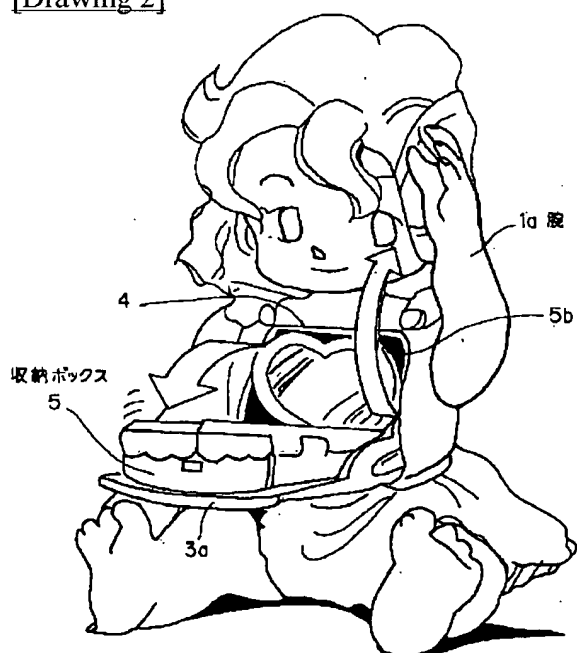
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

## DRAWINGS

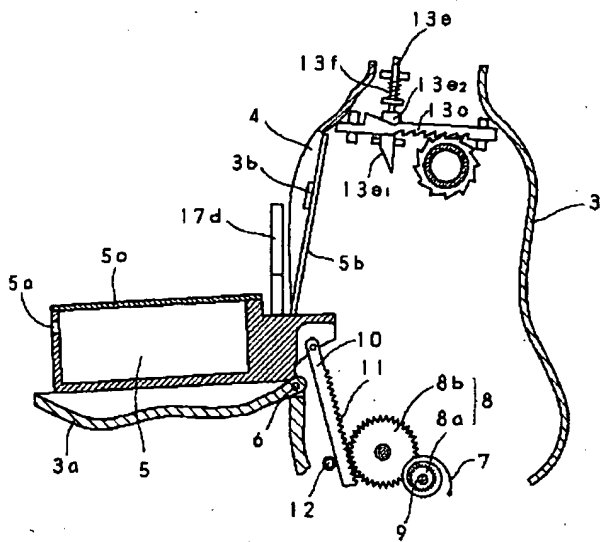
[Drawing 1]



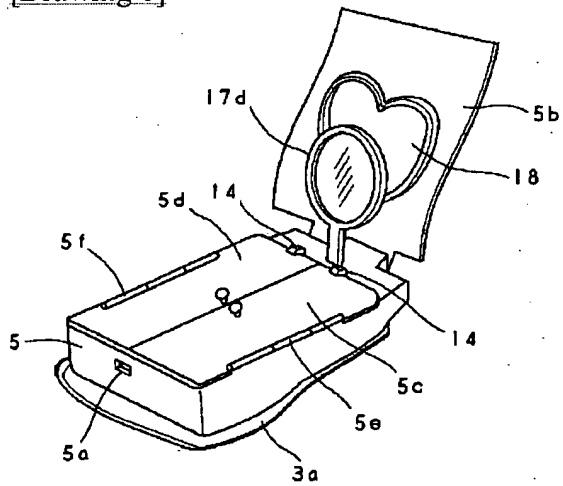
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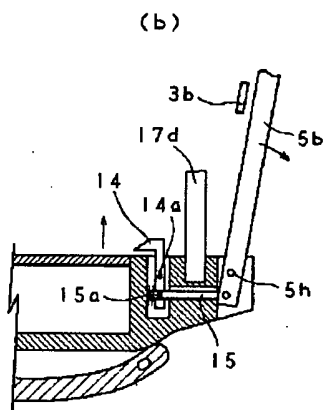
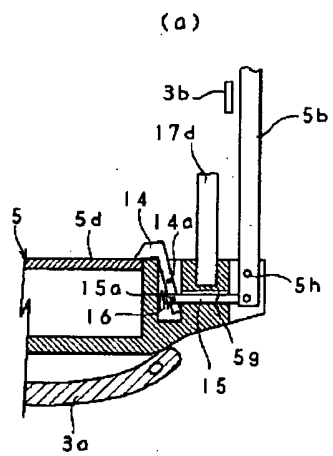




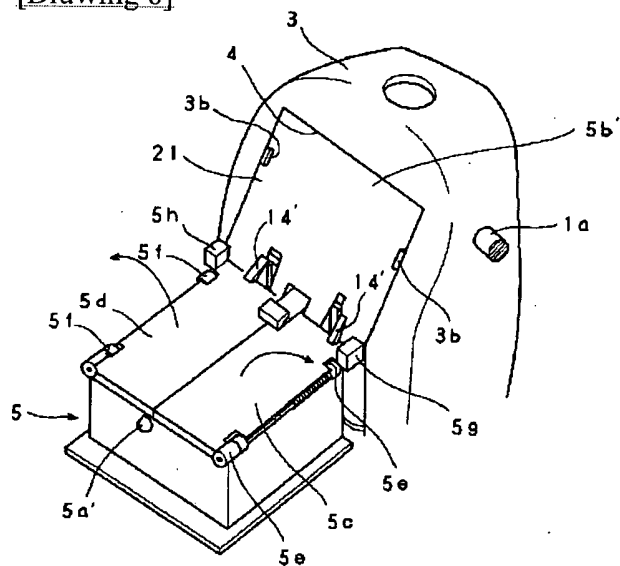
[Drawing 6]



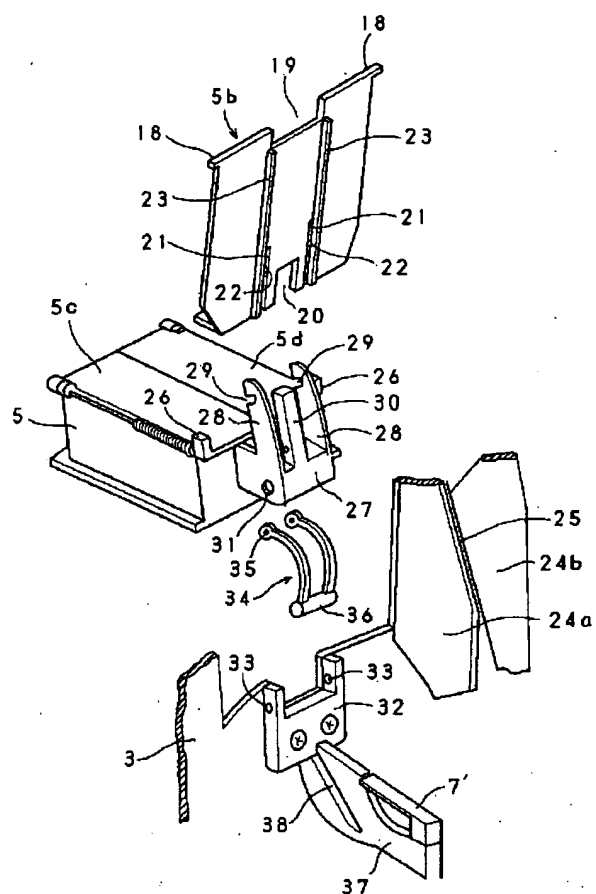
[Drawing 7]



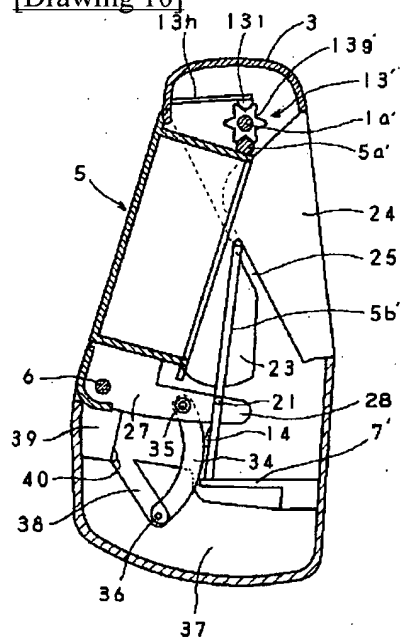
[Drawing 8]



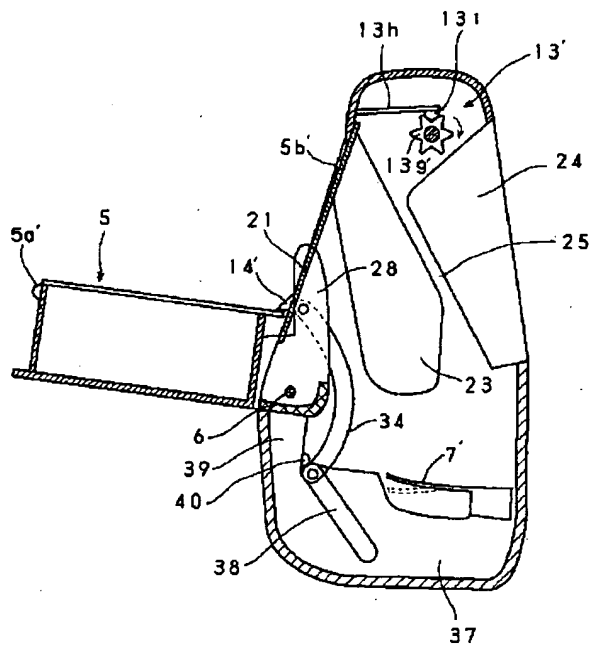
[Drawing 9]



[Drawing 10]



[Drawing 11]



[Translation done.]



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